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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,078	06/04/2001	Franciscus Roffelsen	VRNGDE P46US	2629
75	90 07/10/2003			
Varnum Riddering Schmidt & Howlett Bridgewater Place PO Box 352 Grand Rapids, MI 49501-0352			EXAMINER	
			KRISHNAMURTHY, RAMESH	
			ART UNIT	PAPER NUMBER
			3753	
			DATE MAILED: 07/10/2003	13

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary The MAILING DATE of this communication app		09/763,078	ROFFELSEN, FRANCISCUS			
		Examiner	Art Unit			
		Ramesh Krishnamurthy	3753			
Period fo		to an and dovor one car was the	or, coponacinos adaresos			
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	nely filed /s will be considered timely. In the mailing date of this communication. ID (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on 26.	<u>June 2003</u> .				
2a) <u></u> □	This action is FINAL . 2b)⊠ Th	nis action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
•	on of Claims					
•	Claim(s) 1, 2, 8 - 12 is/are pending in the app					
	4a) Of the above claim(s) is/are withdra	wn from consideration.				
·	Claim(s) <u>8 - 12</u> is/are allowed.					
6)⊠ Claim(s) <u>1 and 2</u> is/are rejected.						
	Claim(s) is/are objected to.					
	Claim(s) are subject to restriction and/oion Papers	or election requirement.				
	The specification is objected to by the Examine	er.				
	The drawing(s) filed on is/are: a)□ acce		aminer.			
, , , _	Applicant may not request that any objection to the					
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority (under 35 U.S.C. §§ 119 and 120					
13)⊠	Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119(a)-(d) or (f).			
a)	⊠ All b) Some * c) None of:					
	1. Certified copies of the priority documen	ts have been received.				
	2. Certified copies of the priority documen	ts have been received in Applica	tion No			
* (3.⊠ Copies of the certified copies of the price application from the International Boundary Bee the attached detailed Office action for a list	ureau (PCT Rule 17.2(a)).				
14) 🗌 A	Acknowledgment is made of a claim for domest	tic priority under 35 U.S.C. § 119	(e) (to a provisional application).			
	i) \square The translation of the foreign language pr Acknowledgment is made of a claim for domes					
Attachmen		_				
2) 🔲 Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	ry (PTO-413) Paper No(s) Patent Application (PTO-152)			
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This office action is responsive to amendment filed 06/26/2003.

Claims 1, 2 and 8 – 12 are pending.

- 1. The finality of the rejection of the last Office action is withdrawn in view of the new grounds of rejection set forth below.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toennesen (US 3,583,430) in view of Chorkey (US 3,451,422).

Toennesen discloses a check valve (Fig. 4) comprising, a valve member (70,71) with a channel (76) opening into a groove (74) blocked by a flexible, ring-like valve element (75) that is displaceable to allow fluid flow past it. The pre-tension on the valve element is adjustable by relative movement between parts (70) and (71) that are connected to each other by screw threads. A screening cap is provided via screw connection to the valve member (70).

The patent to Toennesen discloses the claimed features with the exception of disclosing the flexible, ring-like valve element (75) as an O-ring i.e. flexible, ring-like valve element with a circular cross-section. The flexible, ring-like valve element (75) in Toennesen has a non-circular cross-section.

Chorkey discloses a check valve having flexible, ring-like sealing elements with different cross-sections. Figure 4 discloses an embodiment with a conventional O-ring

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i.e. flexible, ring-like valve element with a circular cross-section as a sealing element. Figure 11 discloses an embodiment having a flexible, ring-like valve element with a non-circular (V-shaped) cross section and Chorkey discloses (Col. 6, lines 1-5) the two configurations (the circular configuration of Fig. 4 and the non-circular configuration of Fig. 11) of the sealing elements to be functional equivalents of each other.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the non-circular flexible, ring-like valve element in Toennesen with the flexible O-ring i.e. flexible, ring-like valve element with a circular cross-section since these are art-recognized equivalents as taught by Chorkey. Additionally, it would have been obvious to one of ordinary skill in the art to substitute an O-ring for the "V" shaped ring as O-rings are more conventional to the art as well as being easier to manufacture than a "V" shaped ring.

Claims 8 – 12 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 1 and 2 have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (703) 305 - 5295. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Rivell, can be reached on (703) 308 - 2599. The fax phone number

for the organization where this application or proceeding is assigned is (703) 872 – 9302 and for after-final communications, the fax phone number is (703) 872 9303.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0861.

Ramesh Krishnamurthy Examiner Art Unit 3753

JOHN RIVELL PRIMARY EXAMINER ART UNIT 347